WHAT IS CLAIMED IS:

1. A braking system comprising:

a power-operated hydraulic pressure source operable to deliver a pressurized working fluid;

a brake including a hydraulically operated brake cylinder; and

a flow-rate changing device disposed between said power-operated hydraulic pressure source and said brake cylinder and operable to change a rate of flow of the pressurized working fluid into said brake cylinder, which rate corresponds to a given rate at which the pressurized working fluid is delivered from said power-operated hydraulic pressure source

2. A braking system according to claim 1, further comprising a hydraulic cylinder disposed between said power-operated hydraulic pressure source and said brake cylinder and including (a) a housing, and (b) a pressurizing piston fluid-tightly and slidably fitted in said housing and having two pressure-receiving surface areas which are different from each other and which respectively partially define a front pressurizing chamber and a rear pressure chamber on front and rear sides of said pressurizing piston, said hydraulic cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said front pressurizing chamber as said pressurizing piston is advanced,

and wherein said flow-rate changing device includes a

switching device having a first state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to one of said front pressurizing chamber and said rear pressure chamber which has a larger one of said two pressure-receiving surface areas, and a second state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to the other of said front pressurizing chamber and said rear pressure chamber.

3. A braking system according to claim 2, wherein said flow-rate changing device further includes a discharge-flow inhibiting device operable to inhibit a discharge flow of the pressurized from said rear pressure chamber while the pressurized fluid is delivered from said power-operated hydraulic pressure source to said front pressurizing chamber under the control of said switching device.

4. A braking system according to claim 3, further comprising a check valve disposed in parallel connection with said discharge-flow inhibiting device, said check valve permitting a flow of the pressurized fluid in a first direction from said power-operated hydraulic pressure source toward said rear pressure chamber and inhibits a flow of the pressurized fluid in a second direction opposite to said first direction.

5. A braking system according to claim 1, further comprising a manually operable brake operating member,

and a hydraulic cylinder disposed between said power-operated hydraulic pressure source and said brake cylinder, said hydraulic cylinder including (a) a housing, (b) a first pressurizing piston fluid-tightly and slidably fitted in said housing and operatively connected to said brake operating member, said first pressurizing piston partially defining a rear pressure chamber on a rear side thereof, and (c) a second pressurizing piston separate from said first pressurizing piston and partially defining a front pressurizing chamber on a front side thereof, said second pressurizing piston cooperating with said first pressurizing piston to partially define an intermediate fluid chamber therebetween, said hydraulic cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said front pressurizing chamber as said second pressurizing piston is advanced,

and wherein said flow-rate changing device includes a switching device having a first state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to said rear pressure chamber, and a second state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to said intermediate fluid chamber.

6. A braking system according to claim 2, wherein said switching device includes a communication control valve device operable for selective fluid communication of said power-operated hydraulic pressure source with one of at least

two fluid chambers of said hydraulic cylinder, said at least two fluid chambers including said front pressurizing chamber and said rear pressure chamber.

7. A braking system according to claim 2, further comprising a pressure control device operable to control a pressure of the pressurized fluid in at least one of at least two fluid chambers of said hydraulic chamber, on the basis of an operation-related amount representative of an operating state of a manually operable brake operating member, said at least two fluid chambers including said front pressurizing chamber and said rear pressure chamber.

8. A braking system according to claim 1, further comprising:

a low-pressure source for storing the working fluid at a pressure substantially equal to an atmospheric level;

a hydraulic cylinder disposed between said power-operated hydraulic pressure source and said brake cylinder and including (a) a housing, (b) a stepped pressurizing piston fluid-tightly and slidably fitted in said housing and including a small-diameter portion partially defining a front pressurizing chamber on a front side thereof, and a large-diameter portion having a larger diameter than said small-diameter portion and partially defining a rear pressure chamber on a rear side thereof, said large-diameter portion cooperating with an outer circumferential surface of said small-diameter portion to partially define an

annular fluid chamber, said hydraulic cylinder being operable to supply said brake cylinder with the pressurized fluid delivered from said front pressurizing chamber as said pressurizing piston is advanced,

and wherein said flow-rate changing device includes a communicating valve device operable while the pressurized fluid is delivered from said power-operated hydraulic pressure source to said rear pressure chamber, said communicating valve device having a first state for permitting a supply flow of the pressurized fluid from said annular fluid chamber to said brake cylinder, and a second state for permitting a discharge flow of the pressurized fluid from said annular fluid chamber to said low-pressure source, said communicating valve device being switched from said first state to said second state while said pressurizing piston is advanced.

9. A braking system according to claim 1, further comprising:

a master cylinder including (a) a housing, and (b) a pressuring piston fluid-tightly and slidably fitted in said housing and partially defining a front pressurizing chamber on a front side thereof, said pressurizing piston being advanced by an operation of a manually operable brake operating member, said master cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said front pressurizing chamber as said pressurizing piston is advanced;

a hydraulic booster operable to apply an assisting force

based on a pressure of the pressurized working fluid received from said power-operated hydraulic pressure source; and

an assisting cylinder including a pressurizing piston which partially defines a pressurizing chamber on a front side thereof and which is advanced by the pressurized working fluid received from said power-operated hydraulic pressure source, said assisting cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said pressurizing chamber thereof as said pressurizing piston thereof is advanced,

and wherein said flow-rate changing device includes a switching device having a first state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to said hydraulic booster, and a second state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to said assisting cylinder.

10. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder, on the basis of a pressure of the fluid in said brake cylinder.

11. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurizing working fluid into said brake

cylinder, on the basis of a rate of increase of a pressure of the fluid in said brake cylinder.

12. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder, when a pressure of the fluid in said brake cylinder has reached a predetermined value which is determined on the basis of an operating state of said power-operated hydraulic pressure source .

13. A braking system according to claim 1, wherein said power-operated hydraulic pressure source includes a pump device comprising (a) an electric motor operable with an electric energy, and (b) a pump driven by said electric motor to deliver the pressurized working fluid,

and wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder when a pressure of the fluid in said brake cylinder has reached a predetermined value which is determined on the basis of an amount of electric energy applied to said electric motor.

14. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder when a pressure of the fluid in said brake cylinder has reached a predetermined value which is determined on the basis

of a temperature of said working fluid.

15. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder on the basis of an operation-related amount of a manually operable brake operating member.

16. A braking system according to claim 1, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder on the basis of a pressure of the pressurized working fluid delivered from said power-operated hydraulic pressure source.

17. A braking system according to claim 2, wherein said flow-rate changing device is operable to change said rate of flow of the pressurized working fluid into said brake cylinder on the basis of a pressure of the pressurized working fluid in said front pressurizing chamber of said hydraulic cylinder.

18. A braking system comprising:

a power-operated hydraulic pressure source including a power-operated drive source and operable to deliver a pressurized working fluid;

a brake including a brake cylinder operated by the

pressurized working fluid delivered from said power-operated hydraulic pressure source; and

a pressure-increase changing device operable to change an amount of increase of a pressure of the fluid in said brake cylinder, which amount of increase corresponds to a given operating amount of said power-operated drive source.

19. A braking system according to claim 18, wherein said power-operated hydraulic pressure source comprises a hydraulic cylinder including (a) a housing, and (b) a pressurizing piston fluid-tightly and slidably fitted in said housing, partially defining a front pressurizing chamber on a front side thereof and advanced by an operation of said power-operated hydraulic pressure source, said hydraulic cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said front pressurizing chamber as said pressurizing piston is advanced.

20. A braking system according to claim 19, wherein said pressure-increase changing device is operable to change an operating amount of said pressurizing piston corresponding to said given operating amount of said power-operated drive source of said power-operated hydraulic pressure source.

21. A braking system according to claim 19, wherein said power-operated hydraulic pressure source includes

said power-operated drive source, said hydraulic cylinder and a force transmitting device disposed between said power-operated drive device and said hydraulic cylinder,

and wherein said pressure-increase changing device includes a transmitting-manner changing portion operable to change a manner of transmitting a force from said power-operated drive source to said pressurizing piston of said hydraulic cylinder, for changing an operating amount of said pressurizing piston corresponding to said given operating amount of said power-operated drive source, to thereby change a rate of flow of the pressurizing working fluid from said front pressurizing chamber into said brake cylinder.

22. A braking system according to claim 21, wherein said power-operated drive source is an electric motor including an output shaft, and said force transmitting device includes:

a rotary motion transmitting device including an output shaft and operable to convert a rotary motion of an output shaft of said electric motor into a rotary motion of said output shaft of said rotary motion transmitting device such that a rotating speed of said output shaft of said rotary motion transmitting device is different from that of said output shaft of said electric motor; and

a motion converting device operable to convert the rotary motion of said output shaft of said rotary motion transmitting device into a linear motion of said pressurizing piston.

23. A braking system according to claim 21, wherein said power-operated drive source is an electric motor having an output shaft, and said force transmitting device includes

a motion converting device including an output shaft and operable to convert a rotary motion of said output shaft of said electric motor into a linear motion of said output shaft of said motion converting device; and

a link mechanism operable to transmit the linear motion of said output shaft of said motion converting device to said pressurizing piston of said hydraulic cylinder such that a speed of the linear motion of the output shaft of said motion converting device is different from a speed of the linear motion of said pressurizing piston.

24. A braking system according to claim 19, wherein said pressurizing piston partially defines a rear pressure chamber on a rear side thereof, and said pressure-increase changing device includes a communication switching device having a first state in which said rear pressure chamber is communicated with said front pressurizing chamber, and a second state in which said rear pressure chamber is isolated from said front pressurizing chamber.

25. A braking device according to claim 24, further comprising a low-pressure source for storing the working fluid at a pressure substantially equal to an atmospheric level,

and wherein said communication switching device is operable to isolate said rear pressure chamber from said front pressurizing chamber and communicate said ear pressure chamber with said low-pressure source.

26. A braking device according to claim 24, further comprising a master cylinder system including a master cylinder operable to pressurize the working fluid according to an operation of a manually operable brake operating member, and wherein said communication switching device is operable to isolate said rear pressure chamber from said front pressurizing chamber and communicate said rear pressure chamber with said maser cylinder system.

27. A braking system according to claim 25, further comprising a master cylinder system comprising a master cylinder including a pressuring piston which partially defines a front pressurizing chamber on a front side thereof, said master cylinder being operable to pressurize the working fluid in said front pressurizing chamber according to an operation of a manually operable brake operating member, and wherein said master cylinder system further comprises a stroke simulator including a housing, a simulator piston which is fluid-tightly and slidably fitted in said housing and which cooperates with said housing to define two variable-volume chambers, and biasing means biasing the simulator piston in a direction that causes a volume of one of said two variable-volume chambers to decrease,

said one variable-volume chamber being connected to said front pressurizing chamber of said master cylinder,

and wherein said communication switching device is operable to isolate said rear pressure chamber from said front pressurizing chamber of said hydraulic cylinder and communicate said rear pressure chamber with the other of said two variable-volume chambers of said stroke simulator.

28. A braking system according to claim 24, wherein said communication switching device includes an electromagnetic control valve provided in a fluid passage connecting said rear pressure chamber and said front pressurizing chamber of said hydraulic cylinder, said electromagnetic control valve being electrically switched between an open state for fluid communication between said rear pressure chamber and said front pressurizing chamber of said hydraulic cylinder, and a closed state for isolation of said rear pressure chamber and said front pressurizing chamber of said hydraulic cylinder from each other.

29. A braking system comprising:

a hydraulic pressure source device including a hydraulic pressure control device and operable to deliver a controlled pressurized working fluid;

a brake including a brake cylinder operated by the pressurized working fluid delivered from said hydraulic pressure source device; and

a pressure-increase changing device operable to change an amount of increase of a pressure in said brake cylinder, which amount of increase corresponds to a given amount of change of a control value of said hydraulic pressure control device.